

SUSAN M. CORMIER, Ph.D.

U.S. Environmental Protection
National Center for Environmental Agency
26 W. Martin Luther King Drive
Cincinnati, OH 45268

Phone: (513) 569-7995
FAX: (513) 569-7609
E-mail: cormier.susan@epa.gov

EDUCATION

Clark University, Worcester, MA	Doctor of Philosophy in Biology	1982
Marine Biological Station, Woods Hole, MA	Neurobiology	1981
Bermuda Biological Station, Bermuda	Tropical Invertebrate Zoology	1979
University of South Florida, Tampa, FL	Master of Arts in Biology	1978
Discovery Bay Marine Laboratory, Jamaica	Algal-Invertebrate Symbiosis	1977
University of New Hampshire, Durham, NH	Bachelor of Arts in Zoology	1975
Worcester Foundation for Experimental Biology, Shrewsbury, MA	Summer Research Fellow	1975

PROFESSIONAL EXPERIENCE

Senior Scientist	National Center for Environmental Assessment- Cincinnati, USEPA, Cincinnati, OH	7/06- present
Senior Science Advisor for Ecology Eco-epidemiologist	National Risk Management Research Laboratory, Cincinnati, OH	8/05-7/06
	National Center for Environmental Assessment- Cincinnati, USEPA, Cincinnati, OH	4/05-7/05
Biologist	National Exposure Research Laboratory, USEPA, Cincinnati, OH	4/02-4/05
Branch Chief	Ecosystems Research Branch, National Exposure Research Laboratory, U.S. EPA, Cincinnati, OH	10/95-4/02
Branch Chief	Physiological and Clinical Indicators Branch, Environmental Monitoring Support Laboratory, USEPA, Cincinnati, OH	6/91-10/95
Resident Scientist	Environmental Monitoring and Support Laboratory, USEPA, Cincinnati, OH	9/89-6/91
Assistant Professor	University of Louisville, Louisville, KY	7/84-9/89
Visiting Assistant Professor	Vassar College, Poughkeepsie, NY	7/82-6/84
Teaching Assistant	Clark University, Worcester, MA	9/79-5/82
Research Assistant	University of South Florida, Tampa, FL	9/76-9/79
Electron Microscopy Technician	University of Massachusetts Medical School, Worcester, MA	2/76-9/76

Publications since 2000

Cormier, S.M. and G.W. Suter II. 2008. A framework for fully integrating environmental assessments. *Environ. Manage.* 42:543-556. Open Access at <http://www.springerlink.com/content/n56531j12q33776t/fulltext.pdf>

- Cormier**, S and A. Critto, 2008. section ed. Steps and Tools for Development of DSSs. In Eds. A. Marcomini, G.W. Suter II, A. Critto, in *Decision Support Systems for Risk Based Management for Contaminated Sites*. Springer. Netherlands.
- Cormier**, S.M., J.F. Paul, R.L. Spehar, P. Shaw-Allen, W.J. Berry, and G.W. Suter II. 2008. Using field data and weight of evidence to develop water quality criteria. *Integr. Environ. Assess. Manag.* 4(4) 490-504.
- Cormier**, S. M., P. Shaw-Allen, J. F. Paul, R. L. Spehar. 2008. Estimation of effect thresholds for the development of water quality criteria. In: I. Linkov, E. Ferguson, V.S. Magar (eds.) *Real-Time and Deliberative Decision Making*, Springer, Netherlands. Pp:159-178.
- Cormier**, S. M. 2008. A synopsis of immediate and deliberate environmental assessments. In: I. Linkov, E. Ferguson, V.S. Magar (eds.) *Real-Time and Deliberative Decision Making*, Springer. Printed in the Netherlands. Pp: 21-29
- Glenn W. Suter II and Susan M. Cormier 2008 Revitalizing Environmental Assessment. *Integr. Environ. Assess. Manag.* 4(4) 385–385
- Norton, S. B., S. M. Cormier, G. W. Suter II, K. Schofield, L. Yuan, P. Shaw-Allen, and C. R. Ziegler. 2008. CADDIS: The Causal Analysis / Diagnosis Decision Information System. Eds. A. Marcomini, G.W. Suter II, A. Critto, in *Decision Support Systems for Risk Based Management for Contaminated Sites*. Springer. Netherlands.
- Linkov, E. Ferguson, V.S. Magar, and S. M. Cormier. Preface 2008. In: I. Linkov, E. Ferguson, V.S. Magar (eds.) *Real-Time and Deliberative Decision Making*, Springer. Printed in the Netherlands. Pp: v-ix.
- Lussier Suzanne M., S. N. da Silva, M.I Charpentier, J. F. Heltshe, S. M. **Cormier**, D. J. Klemm, M. Chintala, and S. Jayaraman. 2008. The influence of suburban land use on habitat and biotic integrity of coastal Rhode Island streams. *Environmental Assessment and Monitoring.* 139(1-3) 119-136.
- Paul, John F.; **Cormier**, Susan M.; Berry, Walter J.; Kaufmann, Philip R.; Spehar, Robert L.; Norton, Douglas J.; Cantilli, Robert E.; Stevens, Richard; Swietlik, William F.; Jessup, Benjamin K. (2008) Developing Water Quality Criteria for Suspended and Bedded Sediments *in Water Practice.* 2 (1): 1-17.
- Suter, G.W. II and S. M. **Cormier**. 2008. What is meant by Risk-Based Environmental Quality Criteria? *Integr. Environ. Assess. Manag.* 4(4) 486–489
- Suter, G.W. II and S.M. **Cormier**. 2008. Revitalizing environmental assessment. *Integrat. Environ. Assess Manage.* 4(4):385.
- Suter, G.W. II and S.M. **Cormier**. 2008. A theory of practice for environmental assessment. *Integr. Environ. Assess. Manag.* 4(4):478-485.
- USEPA. 2007 Causal Analysis Diagnosis Decision Information System. www.epa.gov/caddis.
- Paul, J.F., S.M. **Cormier**, W. Berry, P. Kaufmann, R. Spehar, R. Cantilli, R. Stevens, W. Swietlik, B. Jessup. 2007. Developing water quality criteria for suspended and bedded sediments - illustrative example application. *Water Environment Federation TMDL 2007 Conference, Bellevue, Washington, Water Environment Federation.* Pp 24-45.
- Cormier, S. M. and A. Ferster.** Determining What's Wrong with Your Stream. *Land and Water.* May/June 2007. pp 11-14
- Suter, G. W., **S. M. Cormier**, and S. B. Norton. 2007. Ecological Epidemiology and Causal Analysis. *in Ecological Risk Assessment* by Glenn Suter. CRC Press, Taylor and Francis Group, Boca Raton, FL. pp. 39-68.
- Suter II G. W., S. B. Norton, and **S. M. Cormier** 2007. CADDIS: A System to Help Investigators Determine the Causes of Biological Impairments in Aquatic Systems. Newsletter: Water Environment Federation.

- Cormier S.**, Blaney B., Chang, M., Lehman, S., Morrison, M., Nietch, C., and Williams, J., 2006. Science of integrated watershed management: linking pollution control practice with water quality. In: Wichelns, D. (Ed.) "Innovations in Reducing Nonpoint Source Pollution: Methods, Policies, Programs, and Measurement," Proceedings of a conference organized by the Rivers Institute at Hanover College, November 28 to 30, Indianapolis, Indiana.
- Lussier, S. M. S. N. Dasilva, M. Charpentier, J. F. Heltshe, **S. M. Cormier**, D. J. Klemm, M. Chintal, and S. J. ayaraman. 2007. The influence of suburban land use on habitat and biotic integrity in Rhode Island streams. *Environmental Monitoring and Assessment*. 139(1-3): 119-136.
- Cormier, S. M.** 2006. An eco-epidemiology: an perspective for developing water quality standards. *Society of Environmental Toxicology and Chemistry Globe*. July issue.
- Cormier, S. M.** and P. Shaw-Allen. 2006. Presentation Materials on EPA's Stressor Identification Process. Electronic DVD. Society of Environmental Toxicology and Chemistry Balitimore, MD 2005.
- USEPA. 2006. Causal Analysis Diagnosis and Decision Information System (CADDIS). Website. www.epa.gov/caddis **One of 5** key authors.
- Cormier, S. M.** 2006. Eco-epidemiology: an approach for developing water quality August issue.
- NRMRL Water Quality Leadership Team. 2006. Research Strategy for Protecting and Restoring Aquatic Ecosystems and Water Quality and Quantity through an Integrated Watershed Approach. **Primary author**, team of 18.
- USEPA. 2006. *Framework for Developing Suspended and Bedded Sediments Water Quality Criteria* **One of nine** primary authors. EPA-822-R-06-001.
- USEPA. Causal Analysis Diagnosis and Decision Information System (CADDIS). Website. www.epa.gov/caddis release 1/24/2006. **One of 5** key contributors.
- Cormier, S. M.** 2006. Ecoepidemiology: A Means To Safeguard Ecosystem Services That Sustain Human Welfare. ed. G. Arapis, N. Goncharova and P. Baveye. Springer, Amsterdam, Netherlands. Pp. 57-72.
- Cormier, S. M** and E. L. Lin. 2005. Reference values for fish exposures to PAH contaminants: comparison of streams in Ohio and the mid-Atlantic Region. *Ecotoxicology*. Pp. 1-10.
- Cormier. S. M** and J. J. Messer 2004. Opportunities and challenges in surface water quality monitoring. ed. G. Bruce Wiersma. In: *Environmental Monitoring*. CRC Press, 3848 FAU Blvd, Boca Raton, FL. Pp.217-233.
- U.S. EPA. 2004. Development Plan for the Causal Analysis/Diagnosis Decision Information System (CADDIS). EPA/600/R-03/074. (**one of six** coauthors, S. Norton lead).
- Cormier, S. M.** , S. B. Norton, G. W. Suter II. 2003. The U.S. Environmental Protection Agency=s Stressor Identification Guidance: A Process for Determining the Probable Causes of Biological Impairments. *Human and Ecological Risk Assessment*.9:1431-1444.
- Norton, S. B, L. Rao, G.W. Suter II and **S.M. Cormier**. 2003 accepted. Minimizing Cognitive Errors in Site-Specific Causal Assessments. *Human and Ecological Risk Assessment*. 9:213-230.
- S. M. Cormier**, S. B. Norton, G. W. Suter II, Bhagya Subramanian, Leela Rao. 2003. Illustrated Glossary of the Associations used in Causal Analysis.
- S. B. Norton, **S. M. Cormier**, G. W. Suter II. 2002. The Easiest Person to Fool. *J. Environmental Toxicology and Chemistry*. 21:6:1099-1100.

- Suter, G.W., S.B. Norton, and **S.M. Cormier**. 2002. A methodology for Inferring the Causes of Observed Impairments in Aquatic Ecosystems. In: Environmental Toxicology and Chemistry 21(6): 1101-1111.
- Norton, S.B., **S. M. Cormier**, G. Suter III, B. Subramanian, E.L.C. Lin, D. Altfater and B. Counts. 2002. Determining Probable Causes of Ecological Impairment in the Little Scioto River, Ohio, USA: Part 1: Listing Candidate Causes and Analyzing Evidence. In: Environmental Toxicology and Chemistry Journal. 21(6): 1112-1124.
- Cormier, S.M.**, S.B. Norton, G.W. Suter, D. Altfater and B. Counts. 2002. Determining the Causes of Impairments in the Little Scioto River, Ohio: Part 2: Characterization of Causes. In: Environmental Toxicology and Chemistry. 21(6): 1125-1137.
- Norton, S.B., **S.M. Cormier**, M. Smith, R.C. Jones, and M. Schubauer-Berigan. 2002. Predicting Levels of Stress from Biological Assessment Data: Empirical Models from the Eastern Corn Belt Plains. In: Environmental Toxicology and Chemistry. 21(6):1168-1175.
- Klemm, D. J. K. A Blocksom, W. T. Thoeny, F. A. Fulk, A. T. Herlihy, P. R. Kaufman, **S. M. Cormier**. 2002 Methods Development and Use of Macroinvertebrates as Indicators of Ecological conditions for Streams in the Mid-Atlantic Highlands Region. Environmental Monitoring and Assessment. 78:169-212.
- USEPA. 2002. Summary report for the workshop on the causal analysis/diagnosis decision information system (CADDIS). EPA/600/R-02/078 (**one of 11** coauthors, S. Norton lead).
- Blocksom, K.A., J.P. Kurtenbach, D.J. Klemm, F.A. Fulk, and **S.M. Cormier**. 2002. Development and Evaluation of the Lake Macroinvertebrate Integrity Index (LMII) for New Jersey Lakes and Reservoirs. Environmental Monitoring and Assessment. 77(3):311-333.
- Cormier, S.M.**, D. Reed-Judkins, S.B. Norton, G. Suter, and W. Sweitlik. 2001. USEPA Stressor Identification Guidance Document. EPA Document published by the Office of Research and Development and Office of Water. EPA/822/B-00/025.
- Lin, E.L.C., T.W. Neiheisel, J.E. Flotemersch, B. Subramanian, D.E. Williams, M.R. Millward, and **S.M. Cormier**. 2001. Historical Monitoring of Biomarkers of PAH Exposure of Brown Bullhead in the Remediated Black River and the Cuyahoga River, OH. J. Great Lakes Research, 27(2):191-198.
- Flotemersch, J.E., **S.M. Cormier**, and B.C. Autrey. 2001. Comparisons of Boating and Wading Methods Used to Assess the Status of Flowing Waters. U.S. Environmental Protection Agency, Office of Research and Development, Cincinnati, OH. EPA Report EPA/600/R-00/108.
- Flotemersch, J.E., **S.M. Cormier**, and B.C. Autrey. 2001. Logistics of Ecological Sampling on Large Rivers. U.S. Environmental Protection Agency, Office of Research and Development, Cincinnati, OH. EPA Report EPA/600/R-00/109.
- USEPA. 2001. A Survey of Fish Contamination in Small Wadeable Streams in the Mid-Atlantic Region. U.S. Environmental Protection Agency, Office of Research and Development, Cincinnati, OH. EPA Report EPA/600/R-00/107. **one of two** authors.
- Dorward-King, E, J., G. W. Suter II, L. A. Kapustka, D. R. Mount, D. K. Reed-Judkins, **S. M. Cormier**, S. D. Dyer, M. G. Luxon, R. Parrish, G. A. Burton Jr. 2001. Distinguishing Among Factors that Influence Ecosystems. in: Ecological Variability: Separating Natural from Anthropogenic Causes of Ecosystem Impairment. ed. D. J. Baird and G.A. Burton, Jr., Society of Environmental Toxicology and Chemistry Press pp. 1-26.
- Burton Jr., G. A., S. D. Dyer, **S. M. Cormier**, G. W. Suter II, Dorward-King, E, J., 2001. Identifying Watershed Stressors Using Database Evaluations Linked with Field and Laboratory Studies: A case Example. in: Ecological Variability: Separating Natural

- from Anthropogenic Causes of Ecosystem Impairment. ed. D. J. Baird and G.A. Burton, Jr., Society of Environmental Toxicology and Chemistry Press pp. 233-253.
- Cormier, S. M.** and F. B. Daniel. 2000. Biomarkers: Taking the science forward. *Environmental Toxicology and Chemistry*. 19: 4(2).
- Cormier, S.M.**, M.R. Millward, C. Mueller, B. Subramanian, R.D. Johnson and J.E. Tietge. 2000. Temporal Trends in Ethoxyresorufin-[o]-Deethylase Activity of Brook Trout (*Salvelinus fontinalis*) Fed 2,3,7,8-Tetrachlorodibenzo-p-dioxin. *Environmental Toxicology and Chemistry*. 19:4(2), pp. 462-471.
- Cormier, S.M.**, M. Smith, S.B. Norton, and T. Neiheisel. 2000. Assessing Ecological Risk in Watersheds: A Case Study of Problem Formulation in the Big Darby Creek Watershed. *Environmental Toxicology and Chemistry*. 19:4(2), pp. 1082-1096.
- Schubauer-Berigan, M.K., M. Smith, J. Hopkins and **S.M. Cormier**. 2000. Using Historical Biological Data to Evaluate Status and Trend in the Big Darby Creek (Ohio) Watershed. *Environmental Toxicology and Chemistry*. 19:4(2), pp. 1097-1105.
- Cormier, S.M.**, E.L.C. Lin, F.A. Fulk and B. Subramanian. 2000. Estimation of Exposure Criteria Values for Biliary Polycyclic Aromatic Hydrocarbon Metabolite Concentration in White Suckers (*Catostomus commersoni*). *Environmental Toxicology and Chemistry*. 19:4(2), pp. 1120-1126.
- Cormier, S.M.**, E.L.C. Lin, M.R. Millward, M.K. Schubauer-Berigan, D. Williams, B. Subramanian, R. Sanders, B. Counts and D. Altfater. 2000. Using Regional Exposure Criteria and Upstream Reference Data to Characterize Spatial and Temporal Exposures to Chemical Contaminants. *Environmental Toxicology and Chemistry*. 19:4(2), pp. 1127-1135.
- Lin, E.L.C., T.W. Neiheisel, J. Flotemersch, B. Subramanian, M.R. Millward, D.E. Williams, and **S.M. Cormier**. 2000. Historical monitoring of biomarkers of exposure of Brown Bullhead in the remediated Black River, Ohio and two other Lake Erie tributaries. In: *J. Great Lakes Research*: 27(2): 191-198.
- Stahl, Jr., R. G., J. Orme-Zavaleta, K. Austin, W. Berry, J. R. Clark, **S. Cormier**, W. Fisher, J. Garber, R. Hoke, L. Jackson, G. Kreamer, C. Muska, and M. e. Sierszen. 2000. Ecological Indicators in Risk Assessment: Workshop Summary. In *Human and Ecological Risk Assessment*: 6:(4) pp 671-677.